Mr. Michael R. Edwards Henry County Memorial Hospital 1000 N. 16th Street New Castle, Indiana 47362

Re: Minor Source Modification No: 065-11880-00035

Dear Mr. Edwards:

Henry County Memorial Hospital applied for a Part 70 operating permit application on March 8, 2000 for a hospital medical waste incinerator. An application to modify the source was received on February 14, 2000. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction and operation at the source:

(1) 1012 HP, 755 KW Generator and (1) 1135 HP, 750 KW, Generator for the production of Emergency Power (including Peak Shaving Time) which are located outside the building exhausting directly into the atmosphere via normal automotive pipe and muffler.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(I)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for R. Joe Crawford or extension 3-0431, or dial (317) 233-0431.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Management

Attachments RJC

cc: File - Henry County

U.S. EPA, Region V

Henry County Health Department

Air Compliance Section Inspector- Warren Greiling

Compliance Data Section - Karen Nowak

Administrative and Development - Janet Mobley Technical Support and Modeling - Michele Boner

PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR MANAGEMENT

Henry County Memorial Hospital 1000 N. 16th Street New Castle, Indiana 47362

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 065-11880-00035	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates: Two Emergency Power Generators

Responsible Official: Michael R. Edwards

Source Address: 1000 N. 16th Street, New Castle, Indiana 47362

Mailing Address: P.O. Box 490, 1000 N. 16th Street, New Castle, Indiana 47362

Phone Number: (765)-521-1519

SIC Code: 8062 County Location: Henry

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Minor Source, under PSD Rules;

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) (1) 1135HP, 750KW Generator and (1) 1012HP, 755KW Generator for the production of Emergency Power (including Peak shaving Time) which are located outside the building exhausting directly into the atmosphere via normal automotive type pipe and muffler.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

- (1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.
- (2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.
- (3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.

SECTION C

GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).
- C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
 - (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM, IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.
- C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
 - (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.
 - (b) Any application requesting an amendment or modification of this approval shall be submitted to:

> Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM,, if the source

submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.7 Compliance Monitoring [326 IAC-2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permitee shall be responsible for installing any necessary equipment and initiating any required monitoring related to the equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operations begins.

- C.8 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
 - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.9 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.

- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.10 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: (1) 1135HP, 750KW Generator and (1) 1012HP, 755KW Generator for the production of Emergency Power (including Peak shaving Time) which are located outside the building exhausting directly into the atmosphere via normal automotive type pipe and muffler.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5 (1)]

D.1.1 Insignificant Activities [326 IAC 2-7-1 (21) (G) (xxii) (BB) (bb)

Pursuant to the Part 70 Permit definition of insignificant activities, these emergency generators are classified as insignificant activities.

D.1.2 Operation Limitation

Pursuant to the definition emergency generators as contained in a guidance memorandum from the U.S. EPA dated September 6, 1995, operation of these generators shall be limited to an annual total of 500 hours each.

Compliance Determination Requirements

D.1.3 Testing Requirements

The Permitee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Record Keeping and Reporting Requirements

D.1.4 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permitee shall maintain records of the following:
 - (1) The hours operated of each emergency generator approved under this Minor Source Modification (MSM),
 - (2) Records of annual fuel usage of each emergency generator approved under this MSM.
- (b) All records shall be maintained in accordance with Section C-General Record Keeping Requirements of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

	urce Name: urce Address:
Ма	illing Address:
Sou	urce Modification No.:
	This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.
	Please check what document is being certified:
9	P Test Result (specify)
9	Report (specify)
9	Notification (specify)
9	Other (specify)
	certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Si	ignature:
Pı	rinted Name:
Ti	itle/Position:
D	eate:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Minor Source Modification

Source Background and Description

Source Name: Henry County Memorial Hospital

Source Location: 1000 N. 16th Street, New Castle, Indiana 47362

County: Henry SIC Code: 8062

Operation Permit No.: 065-11880-00035 Permit Reviewer: R. Joe Crawford

The Office of Air Management (OAM) has reviewed an application from Henry County Memorial Hospital relating to the construction and operation of two emergency power generators.

New Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(1) 1135 HP, 750 KW, Generator and (1) 1012 HP, 755 HP Generator for the production of Emergency Power (Including Peak Shaving Time) which are located outside the building exhausting directly into the atmosphere via normal automotive type pipe and muffler.

There are no unpermitted facilities operating at this source during this review process.

Stack Summary

The source has located both of the emergency power generators outside of the hospital building, where they exhaust directly into the atmosphere via a automotive style exhaust pipe and muffler.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on February 10, 2000.

Source Name: Henry County Memorial Hospital

Location: New Castle, Indiana Permit Reviewer: R. Joe Crawford

Emission Calculations

See Appendix A (1 page) of this document for detailed emissions calculations

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	*Potential To Emit (tons/year)
PM	0.4
PM-10	0.0
SO ₂	0.6
VOC	0.4
CO	3.0
NO _x	12.9

^{*}PTE calculations based on 500 hrs/yr

(a) Potential to emit (as defined in the Indiana Rule) of NOX is less than 25 tons per year, but greater than 5 tons per year. Therefore, pursuant to 326 IAC 2-7-10.5 (d) (4) (A), a minor source modification is required.

County Attainment Status

The source is located in Henry County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO_2	attainment
Ozone	attainment
СО	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Henry County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Henry County has been classified as attainment or unclassifiable for all other criteria pollutants Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

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Source Name: Henry County Memorial Hospital

Location: New Castle, Indiana Permit Reviewer: R. Joe Crawford

Pollutant	Emissions (ton/yr)
PM	Less than 25
PM10	Less than 25
SO ₂	Less than 25
VOC	Less than 25
CO	Less than 100
NO _x	Less than 25

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Proposed Modification

PTE from the proposed modification (based on 500 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	0.4	0.0	0.6	0.4	3.0	12.9
PSD or Offset Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted a Part 70 application on March 8, 2000. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to these emergency generators.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to these emergency generators.

State Rule Applicability

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute

Source Name: Henry County Memorial Hospital

Location: New Castle, Indiana Permit Reviewer: R. Joe Crawford Page 4 of 4 065-11880-00035

averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations.

Conclusion

The construction and operation of the emergency generators shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification 065-11880-00035.

Appendix A: Emission Calculations Internal Combustion Engines - Diesel Fuel 1135hp & 1012hp emergency diesel generators

Company Name: Henry County Memorial Hospital

Address City IN Zip: 1000 N. 16th Street, New Castle, IN 47362

CP#: 065-11880-00035
Plt ID: 065-00035
Reviewer: R. Joe Crawford
Date: Feb 18,2000

A. Emissions calculated based on output rating 1135 hp

Heat Input Capacity Potential Throughput S= 0.15 = WEIGHT % SULFUR

Horsepower (hp) hp-hr/yr

1135.0 567500.0

	Pollutant							
	PM*	PM10*	SO2	NOx	VOC	CO		
Emission Factor in lb/hp-hr	0.0007		0.0012	0.024	0.00071	0.00550		
		not provided	(.00809S)	**see below				
Potential Emission in tons/yr	0.2	0.0	0.3	6.8	0.2	1.6		

B. Emissions calculated based on output rating 1012 hp

Heat Input Capacity Potential Throughput S= 0.15 = WEIGHT % SULFUR

Horsepower (hp) hp-hr/yr

1012.0 506000.0

	Pollutant								
	PM*	PM10*	SO2	NOx	VOC	CO			
Emission Factor in lb/hp-hr	0.0007		0.0012	0.024	0.00071	0.00550			
		not provided	(.00809S)	**see below					
Potential Emission in tons/yr	0.2	0.0	0.3	6.1	0.2	1.4			

^{**}NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr Note that the PM10 emission factor in lb/hp-hr is not provided in the Supplement B update of AP-42. An average conversion factor of 1hp-hr = 7,000Btu is provided below.

Methodology

Potential Througput (hp-hr/yr) = hp * 500 hr/yr

Emission Factors are from AP 42 (Supplement B 10/96) Table 3.4-1 and Table 3.4-2

1 hp-hr = 7000 Btu, AP42 (Supplement B 10/96), Table 3.3-1, Footnote a.

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 500 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-/hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

^{*}No information was given regarding which method was used to determine the PM emission factor or whether condensable PM is included. The PM10 emission factor is filterable and condensable PM10 combined.